Federated ATLAS XRoot Deployment Plan "1.0"

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## People involved

- Doug B.
- Andy H.
- Gerri Ganis
- Hiro Ito
- Angelos Molfatas
- Charles W.
- Wei Yang

## Scope

- "1.0": minimum requirements for production rollout to tier3 sites (~8)
- Not addressing:
  - "No-LFC" mode requires changes to site services and major storage reorganization
  - Tuning of WAN client (ongoing)
  - Web monitoring (In-progress, Dubna group)
  - Bandwidth limits/reservations (can add simple throttling as needed)

#### Sites

- BNL T3
- SLAC T3
- UTA T3
- Duke
- Argonne/ASC
- IU T3
- UC T3
- NYU
- T1/T2 on "best effort" basis

#### Outstanding issues

- Stable Xroot release/packaging
- Resolution of security issues
- DQ2-client release incl. xrdcp support
- Review of FRM scripts

# Xroot release/packaging

- Xrootd 3.0.3 has some issues (Kerberos, etc.)
  - Has been mostly OK for testing
  - 3.0.4 will be the supported release (OSG/xroot.org)
  - Timeframe: 3 weeks

## Security requirements

- Has been difficult to get clear answers
- Decisions made "behind closed doors"
- Current proposal should satisfy everyone

## Security options

- Open model
  - Fast/simple/lightweight
  - "Will never get past ATLAS security" (current R&D activity is permitted).
- Shared Secret (sss)
  - Already implemented in xrootd
  - Reasonably secure (ATLAS controls distribution of secret key)
  - "Rejected by ATLAS Security"

# Security (2)

- GSI/x509 plugin for xrootd
  - Require "atlas-xrootd" in DN
  - Not really secure since ATLAS does not control issuance of certs
  - Timeframe: 3-4 weeks (possibly in 3.0.4 release)
- X509+VOMS
  - Since ATLAS controls ATLAS VOMS server, this is the most secure solution
  - Also allows user access for VO members (e.g. run ROOT analysis on your laptop)
  - Timeframe: ~6 weeks Gerri will evaluate after GSI

#### DQ2-Client

- Hiro has added xrdcp support to dq2-get
  - In CERN repo, not yet released
  - Next release (Angelos): ~2 weeks
  - Hiro adding 'xprep' (async pre-stage) support as well, may be ready for this release

#### FRM review

- Doug has developed config and scripts for FRM development ("tier3-as-cache model"), and requested a review
- Timeframe: 2-3 weeks (Andy/Wei)

#### Summary

- Xrootd 3.0.4 release: 3 weeks
- GSI security plugin: 3-4 weeks
- VOMS security plugin: 4-6 weeks (?)
- DQ-Clients release: 2 weeks
- FRM review: 3 weeks